

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended): A hot-gas blowing fan, comprising:
a heat resisting impeller cantilevered by a rotating shaft[[,]];
a bearing attached to the rotating shaft[,,];
a heat insulating layer disposed between the impeller and the bearing; [[and]]
a cooling portion disposed between the heat insulating layer and the bearing, and the
cooling portion includes a cooling fluid to remove heat from the bearing and the rotating
shaft without contacting the bearing or the rotating shaft;
~~wherein a first magnetic coupling to be mated with another magnetic coupling is~~
disposed on [[the]] a shaft end of the rotating shaft at [[the]] a side opposite to the impeller;
a second magnetic coupling configured to be mated with the first magnetic coupling
and disposed on a shaft end of a driving shaft of a motor; and
a non-magnetic partition wall [[is]] disposed between the first magnetic coupling and
[[a]] ~~the second magnetic coupling to be mated with the first magnetic coupling is disposed~~
~~on the shaft end of the driving shaft of a motor,~~
~~whereby wherein~~ a space surrounding the rotating shaft is hermetically sealed from an
~~outer field exterior of the hot-gas blowing fan~~ by the non-magnetic partition wall and a
casing.

2. (Currently Amended): The hot-gas blowing fan according to Claim 1, wherein ~~an~~
~~inert gas is filled in the hermetically sealed space~~ is filled with an inert gas.

3. (Currently Amended): A hot-gas blowing fan, comprising:
a heat resisting impeller cantilevered by a rotating shaft[,,];

a bearing attached to the rotating shaft[[,]];

a heat insulating layer disposed between the impeller and the bearing, ~~which further comprises;~~

~~an air cooling means comprising a heat receiving portion disposed between the heat insulating layer and the bearing, and the heat receiving portion includes a cooling fluid to remove heat from the bearing and the rotating shaft without contacting the bearing or the rotating shaft;~~

an air cooling/radiating portion provided at an outer side of a casing; and

a heat transporting portion connecting the heat receiving portion to the air cooling/radiating portion.

4. (Original): The hot-gas blowing fan according to Claim 3, wherein the heat receiving portion and the heat transporting portion are unified to form a thermo-siphon heat pipe.

5. (Currently Amended): The hot-gas blowing fan according to Claim 1, wherein the cooling portion is ~~an air cooling means comprising~~ includes a heat receiving portion disposed between the heat insulating layer and the bearing, and ~~the heat receiving portion is connected to~~ an air cooling/radiating portion provided at an outer side of the casing [[and]] via a heat transporting portion ~~connecting the heat receiving portion to the air cooling/radiating portion.~~

6. (Currently Amended): The hot-gas blowing fan according to any one of Claims 1 to 5, wherein further comprising:

an inertia dust collector [[is]] provided at [[the]] an inlet port of a scroll.

7. (Currently Amended): The hot-gas blowing fan according to ~~any one of Claims 1 to 6~~ Claim 1, ~~which is used for~~ wherein the hot-gas blowing fan is configured to be attached to a solid oxide fuel cell.

8. (New): The hot-gas blowing fan according to Claim 3, wherein the hot-gas blowing fan is configured to be attached to a solid oxide fuel cell.

9. (New): The hot-gas blowing fan according to Claim 1, further comprising: a heat insulating spacer disposed between the heat insulating layer and the cooling portion to block heat transfer between the heat insulating layer and the cooling portion.

10. (New): The hot-gas blowing fan according to Claim 3, further comprising: a heat insulating spacer disposed between the heat insulating layer and the heat receiving portion to block heat transfer between the heat insulating layer and the heat receiving portion.

11. (New): The hot-gas blowing fan according to Claim 1, wherein a temperature of the cooling fluid is higher than a temperature of a dew-point of a process gas blown by the hot-gas blowing fan.

12. (New): The hot-gas blowing fan according to Claim 3, wherein a pressure in the heat receiving portion is adjusted so that a boiling point of the cooling fluid is higher than a dew-point of a process gas blown by the hot-gas blowing fan.